

Marine Safety Flash

A16-04 (5th February 2016)



Grinding and Buffing – Hazardous Condition

Incident Overview

While preparing a job on board a vessel it was discovered that a new Twist knot cup wire buffing wheel had a max RPM rating of 12000RPM. This was reported to be 2000 RPM less than vessel Electric grinder (max RPM rating of 14000 RPM) and 1000 less than vessel Air grinder (max RPM of 13000 RPM).

This issue was raised immediately with the Safety representative on board and entered as a Near Miss incident into the system. Additionally this was brought to the attention of the Ship Manager and HSE adviser.

A thorough investigation was undertaken on board of all rotating hand tools and associated equipment (e.g. buffing wheel) to identify any other under spec items.

This near miss incident has raised awareness and prompted questions to be asked of suppliers and distributors as well as looking at our own internal process for ordering consumables.

The supplier has been requested to confirm suitability before distribution.

The due diligence of the crewmember making the finding is recognized for his input and contribution.

Key Findings

- A selection of Twist knot cup wire buffing wheels has been found to be unsuitable for the electric or the air grinder due to incompatible RPM ratings
- Historically Twist knot buffing wheels supplied from Asia have been identified to have max RPM rating of 12500 RPM.

Recommendations

- Vessel to ensure the Material requisition clearly identifies the item is fit for purpose at time of order, this includes the RPM rating.
- Vessels to ensure the items ordered for use with any electrical or air tooling to be fit for purpose and match or exceed the requirements of the equipment.
- Purchasing department is to advise suppliers to ensure that any rotating consumables for use with electrical or air tooling ordered matches or exceeds the requirements.

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- Vessels to undertake stock take of twist knot buffing wheels and grinding discs and report back to respective Ship Managers of any out of spec equipment or consumables.